

TORREYA

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ORIGIN OF RHUS BIPINNATA

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From the annals of botany and of horticulture a list of some length might be made of so-called varieties of trees and shrubs, each differing from its specific type by more or less deeply cut or cleft leaves or leaflets; and the varietal name *laciniata*, by the way, is almost uniformly employed to designate this kind of morphological aberration. One meets with it in genus after genus, and it is found associated with the mutations of more than one species within the same genus, as in the case of *Rhus*, when we have *Rhus glabra laciniata*, and an earlier *Rhus typhina laciniata*.

Heretofore this not unusual type of variability has not seemed significant to botanists, if one may judge by the brief and slighting allusions made to them in our books of botany, where they are apt to be treated as if not deserving varietal names; so that for any even half-adequate account of them one must consult books or journals of horticulture — this even in the case of *Rhus bipinnata*, which originated not under cultivation, but was found wild in the woods of eastern Pennsylvania; a shrub so widely at variance with its nearest allies that the finder did not even guess it to be a *Rhus* at all.

In the light of the mutation theory, newly advanced and already meeting with wide acceptance, the class of morphologic deviations to which this fine sumac belongs attains a new significance. Every such plant deserves from systematic botany better treatment than that of being passed by without a name.

In the heading of these notes I shall seem to have promised an account of the origin of the form under consideration. But my meaning is rather to indicate how far we are from knowing how the shrub originated; hoping, however, to incite those living

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near its original habitat to make, if it be not too late, a thorough investigation of the matter.

The earliest mention I find made of this sumac in any book of botany is that by Darlington,* who gives an excellent description of its characters, as far as known; and this is the most respectable mention I find of it in any flora. The locality where it was found is within the limits of Chester County, where Darlington lived; but it does not appear that he ever sought it out in its wild state. Its discoverer was Mr. Kilvington, concerning whom I obtain the information through Mr. Meehan: "Concerning Robert Kilvington; our Mr. Joseph Meehan recalls him perfectly and says that he lived on Woodland Avenue, West Philadelphia. He and his generation, however, have passed away. Kilvington was a botanist of considerable local note, and his attainments were highly appreciated by those who knew him. He was a private gardener for a time near Philadelphia, later going into business for himself as a florist." †

According to the late Thomas Meehan ‡ Mr. Kilvington must have cultivated and propagated his fine discovery, though into southern Europe, where it was greatly prized, it was introduced by the botanist Elias Durand, of Philadelphia; § and ten years after it was first described, but namelessly, by Darlington, Carrière named and described it as *Rhus glabra laciniata*. Only a few of the leaflets in even Carrière's figure are properly lacinate, most of them being pinnately divided, so that the foliage as a whole is, as Darlington said, bipinnate; and in the considerable number of herbarium specimens now before me, from various gardens, all the leaves have pinnate leaflets, none being merely lacinate.

It is of touching personal interest to know that this beautiful mutation has been planted at the grave of Dr. Darlington, who gave the earliest account of it; for I find, in the herbarium that belonged to the late M. S. Bebb, and which is now the property

* Flora Cestrica, 3d Ed., 457. 1853.

† S. Mendelsohn Meehan in litt., Aug. 22, 1905.

‡ Gardener's Monthly 18: 355.

§ Carrière, Rev. Hort. 1863: 7.

of the Field Columbian Museum, a large leaf of it, the sheet on which it is mounted bearing the following legend in Mr. Bebb's hand :

"In September, 1863, I made an excursion to the pine barrens of New Jersey and far down along the eastern shore of Maryland, my companion and very helpful guide to localities of special interest being my friend William M. Canby. Together we visited the grave of Dr. Darlington, and finding this shrub growing upon it, I took a single leaf as a memento." *

It seems as if it would be a worthy undertaking on the part of some of the botanists of eastern Pennsylvania to investigate this shrub, so interesting as to the problem of its derivation. It would certainly be well to explore its original habitat, or any other that may chance to have been recorded, with a view to determining whether it seems to have originated as a seedling from *R. glabra* or as a mere offset from another individual.

I find no record in either botany or horticulture of the shrub's having borne flower or fruit ; but in the National Herbarium we have a specimen communicated long ago by Mr. Commons, of Delaware, which bears a panicle of immature fruit. This sample was taken from a cultivated specimen, but where it was grown is not indicated.

U. S. NATIONAL MUSEUM.

NEW FASCIATIONS

BY J. ARTHUR HARRIS

Perhaps the most common of all structural anomalies is that known as fasciation. Occurring in so many forms as it does, it is familiar to everyone and requires no description. In some species, as in the sweet potato and the coxcomb, it is to be observed with such frequency as to almost deserve the designation of a varietal characteristic.

The following cases of fasciation, most of which are not described in Penzig's admirable compendium of vegetable teratology,

* Herb. Field Mus., sheet 14074.